

COLONY OF



NORTH BORNEO

Annual Report
OF
The Medical Department
FOR THE YEAR
1958

★

By

L. J. CLAPHAM, M.D., D.P.H., D.T.M. & H.
Director of Medical Services

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JESSELTON:

PRINTED AT THE NORTH BORNEO GOVERNMENT PRINTING OFFICE.
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30th December 1958.

NORTH BORNEO MEDICAL DEPARTMENT
ANNUAL REPORT, 1957, -
CORRIGENDUM

On page 20 of the report item

A 33 Yellow Fever, delete the figure 1 in columns 2 and 3.

L. J. CLAPHAM

DIRECTOR OF MEDICAL SERVICES

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CHAPTER I — PUBLIC HEALTH

General Health:

1. 1958 was a healthy year for the Colony in that no case of any of the major epidemic diseases was reported. The Colony has remained free from smallpox although it is known to occur in neighbouring territories. Similarly in the middle of the year there was a serious risk of the importation of cholera. Precautionary measures were taken and extensive vaccination against cholera of the vulnerable population was undertaken. Although the disease was not introduced, it proved a valuable exercise to the department in putting into practice its planned methods of counteracting and combating the introduction of an epidemic disease.

2. The main diseases of public health importance continue to be malaria, tuberculosis and intestinal infestations. Great progress, however, has again been made by the Malaria Control team, and the serious difficulties and inability to eliminate transmission in the Project area reported last year have now been overcome. Expansion therefore will begin in the year 1959 and it is hoped that by the end of 1960, all the highly malarious areas in the Colony will have been sprayed at least once. As regards tuberculosis the figures tend to show that the increase in the disease reported during the past five years seems to have been halted so far as attendances for treatment are concerned. However, the true incidence of the disease in the Colony is not yet known.

3. Assistance from the Colombo Plan in a Tuberculosis Control Programme is expected to materialise during 1959. BCG vaccination was introduced during 1958 and up-to date 7,518 vaccinations have been given. A total of 11,735 children have altogether been tested.

4. The statistics shown in Appendix G show that a total number of 533,488 treatments were given at Government hospitals and dispensaries during the year. 39,405 cases of malaria were reported in comparison with 45,333 in 1957. Similarly, there were 1,194 new cases of pulmonary tuberculosis reported in 1958 compared with 2,411 in 1957.

5. The progress previously reported in the provision of adequate water supplies and sanitation to many of the major towns has continued and the beneficial results are now being seen. However, in rural districts intestinal disease and worm infestations remain common although major outbreaks of intestinal disease are fortunately comparatively rare.

6. Most stations report that although nutrition is good in the major centres of population, ignorance as well as poverty combine to result in inadequate nutrition, particularly amongst babies in the rural areas. Iodised salt is being made freely available as a medicine to certain populations where goitre as a result of iodine deficiency is common.

7. Figures showing the number of births and deaths registered in the last five years are:—

	1954	1955	1956	1957	1958
Births Registered	12,115	11,780	12,455	14,816	*12,818
Deaths Registered	3,918	4,088	3,910	3,925	3,358
Excess of Births over Deaths	8,197	7,692	8,545	10,891	
	<i>Indigenous</i>	<i>Chinese</i>	<i>European</i>	<i>Others</i>	<i>Total</i>
*Births Registered in 1958 ...	8,138	3,943	37	590	12,818
Deaths Registered in 1958 ...	2,490	643	6	219	3,358

* Excluding late registrations.

8. The total estimated population at the end of 1958 was 406,220. This total is made up as follows:—

Indigenous	274,301
Chinese	100,291
European (including Eurasian)	1,813
Others	29,815
TOTAL	406,220

9. Accurate figures of maternal and infant mortality are not available and it is doubtful whether they will be available for a number of years. However, an attempt has been made to obtain reasonably accurate figures from at least one centre. They are given below.

Jesselton Town Area:

	<i>Total</i>		<i>Chinese</i>		<i>Indigenous</i>		<i>Others</i>	
	1957	1958	1957	1958	1957	1958	1957	1958
Births	1,091	1,129	730	738	331	363	30	28
Deaths under 1 year ...	81	96	26	30	54	66	1	—
Deaths under 1 month	39	69	12	22	26	38	1	—
Still-births	22	24	15	8	7	16	—	—
Infant Mortality Rate .	74	85	36	41	166	182	(33)	—
Neo-Natal Mortality Rate	36	53	16	30	79	105	(33)	—
Still-birth Rate ...	20	21	20	11	21	42	—	—

The services of the Maternal and Child Welfare Clinics throughout the Colony are increasingly popular and attendances in 1958 were 77,550 representing a substantial increase of 20,000 over 1957. The services of a School Dental Nurse are now available at each Health Centre in Jesselton and Sandakan. School Dental Nurses are local girls trained in New Zealand for two years with the assistance of the Colombo Plan. Most of their equipment has been generously provided by UNICEF.

Malaria Control:

10. A joint scheme for the control of malaria sponsored by the Government, the World Health Organisation and United Nations Children's Fund began operations in July 1955. The World Health Organisation provides senior technical staff, UNICEF provides a great deal of equipment such as vehicles, insecticides, sprayers, laboratory equipment and other supplies, while the Government provides a Malaria Control Officer, the junior technical staff and labour force, and the cost of running the scheme within the Colony. The headquarters of the pilot project are situated at Keningau in the Interior Residency. During the year new housing; a new malariological laboratory, and a new entomological office and laboratory were under construction and these were almost completed by the end of 1958.

11. Until December 1958 a reliable method of stopping the transmission of malaria in the project areas had not been discovered. However, the results of twice annual spraying with a residual insecticide (either DDT or Dieldrin) coupled with mass administration of anti-malarial drugs, namely, Chloroquine and Pyrimethamine given at the time of spraying have shown that transmission can be completely interrupted. Following on these encouraging results, expansion of the spraying (which has hitherto covered only the Interior Residency and the island of Labuan) is planned for the year 1959.

12. The vector of malaria in most parts of North Borneo is *Anopheles leucosphyrus balabacensis* but it is also considered probable that in certain coastal districts the vector may be *Anopheles sundaicus*. Entomological results also indicate that *Anopheles barbirostris*, which has been found infected with sporozoites, may at times act as a carrier.

13. The problems, referred to in the report for 1957 relating to the different values of insecticides, the difficulties encountered in the habits of the vector mosquito, the problems of human habits and so on, now appear to be surmounted. It is probable that DDT will remain the insecticide of choice in the expansion areas and that spraying will be conducted on a twice annual basis combined with the use of anti-malarial drugs at the time of spraying.

14. It is not surprising to find in reports from the various hospitals in the Colony differing accounts of the prevalence of malaria. Although in the Keningau district the team have now been in operation for some years, still patients report themselves suffering from "fever" and 500 such cases were treated during the year in question. This is probably because Keningau itself was left unsprayed as a "control area" until 1958. Similarly Kudat district which has so far been untreated with insecticide reported over 600 proved cases of malaria, most of them being *falciparum*. So far as the major towns of Jesselton and Sandakan are concerned, there is little evidence of malaria transmission within the towns, but there is a high incidence in the surrounding countryside. The island of Labuan is interesting in that it has for 2 years past now been regularly sprayed as a part of the anti-malaria campaign, and it is encouraging to find that there has been no recorded case of malaria acquired in Labuan during 1958. The Medical Officer-in-Charge reports that the incidence of malaria is now almost nil, and further that cases of "fever" do not now respond to anti-malarial treatment. Although the Beaufort district was sprayed, still a fair number of "fever" cases occur and over 650 were reported in 1958. Similarly at Tawau on the East Coast there were over 5,000 proved cases of malaria, only 12 per cent of which were *vivax* infections.

15. Everything therefore now points to the possibility of the very substantial control of malaria—or even eradication—within the foreseeable future. This is a most encouraging development as the major disease causing sickness and economic inefficiency in the Colony is malaria. With the elimination of this disease a very great improvement in public health can be anticipated.

Tuberculosis:

16. Pulmonary tuberculosis continues to cause a great deal of ill-health requiring prolonged treatment and, in consequence, prolonged absence from work, amongst all sections of the community. No accurate figures are available regarding the incidence of the disease in the Colony, but it is hoped that a clearer picture will emerge as a result of the survey which is planned to begin in 1959 with assistance from Australia under the Colombo Plan. Figures relating to outpatients and inpatients attendances and deaths in hospitals annually for the last five years, are given below:

(a) annual admissions to hospitals for treatment of tuberculosis:

1954	1955	1956	1957	1958
554	1,055	1,227	1,218	1,038

(b) annual number of new outpatients attending for treatment:

1954	1955	1956	1957	1958
201	756	1,090	1,193	668

(c) number of deaths in hospital from tuberculosis annually:

1954	1955	1956	1957	1958
22	53	46	54	53

17. That the continued efforts of medical officers and hospitals throughout the Colony for the past few years are now beginning to bear fruit is shown in the reports received regarding tuberculosis from the various stations. Thus the Medical Officer-in-Charge, Jesselton, reports that he notices a considerable decrease in the incidence of tuberculosis amongst Government servants, teachers, hawkers etc. all of whom are regularly examined annually. During 1958 more than 2,500 were examined, only 7 being found positive, whereas the comparable figure in 1954 would have been 25 per thousand.

18. New tuberculosis wards for the treatment of the disease were almost completed in Sandakan and the 68 new beds thus provided will be brought into use in 1959. BCG vaccination following on tuberculin testing has been introduced at many centres throughout the Colony.

19. From the Cottage Hospitals the reports regarding tuberculosis follows a similar pattern. Thus there were 100 known cases under treatment at Kudat where Natives predominated. Tuberculin testing and BCG vaccination had been carried out at all schools and over 1,200 vaccinations had been completed. In Labuan there were 142 patients under active treatment or surveillance, and BCG had been given to more than 1,000 schoolchildren. At Keningau, 300 known cases were under treatment or surveillance compared with 220 in 1957. Keningau remarked on the numbers of tuberculosis of the bone and spine in children. At Beaufort 76 new cases were reported during the year, there being already 300 under treatment or surveillance. BCG was also begun at schools in Beaufort. Tawau reported 100 new cases of tuberculosis, but the circumstances of Tawau are rather special in that a comparatively large number of immigrant workers enter the Colony at this port many of whom are found to be suffering from pulmonary tuberculosis either on their arrival or shortly afterwards.

20. Such figures as are available regarding tuberculin sensitivity may be of interest.

HEAF TUBERCULIN TEST

POSITIVES

<i>Age</i>	<i>Labuan</i>	<i>Keningau</i>
0 — 4	—	7.7%
5 — 7	10.87%	24.0%
8 — 10	18.0%	42.0%
11 — 13	27.0%	—
11 — 16	—	59.0%
17 and over	—	73.0%

21. Thanks to the activities of the North Borneo Anti-Tuberculosis Association (NOBATA) which was formed in the year 1953, measures taken for the treatment and prevention of tuberculosis have received excellent publicity and there is a great deal of enthusiasm among the general public for any measure which will lead to the control and to the prevention of the disease. The work of the Association was of assistance to the Medical Department during the year as help is given in connection with contact tracing; home visits and welfare and relief to tuberculosis sufferers and their dependants, both in and out of hospital.

Intestinal Disorders:

22. As in all tropical countries where general standards of hygiene and sanitation are low, bowel infections form a high proportion of the diseases encountered. However, improved sanitation both as regards disposal of night soil and refuse, and improved water supplies, will substantially reduce the number of bowel diseases in the urban areas. The rural community still rely on unprotected wells and polluted rivers and streams as sources of water, whilst the disposal of excreta and rubbish in most rural areas is unsatisfactory. A large proportion of the general population harbour more than one kind of intestinal parasite, although serious epidemics of bowel infections are remarkably rare.

23. Towards the end of 1958, some public alarm was caused by an outbreak of poliomyelitis in Singapore. Although no abnormal number of cases occurred in North Borneo, a very heavy demand for poliomyelitis vaccine was experienced and, at one stage, considerable difficulties were encountered in obtaining sufficient vaccine. However, it was possible to obtain sufficient vaccine to meet the public demand and over 3,500 children were inoculated.

24. Although the notifications of paralytic poliomyelitis remain low, there is no doubt but that the improvement in sanitation in urban areas may—if experience in other countries is parallel—result in an increase in the number of poliomyelitis cases to be expected in the Colony in the future.

25. Most stations still continue to report that intestinal infections and infestations form a comparatively large part of the number of patients presenting themselves for treatment. As previously remarked, where efficient and pure water supplies are available and proper disposal of excreta can be arranged, the incidence of disease has fallen. Thus there is improvement in both Jesselton and Sandakan, although gastro-enteritis amongst young children is still common. There were two outbreaks of this during the year in Jesselton. Similarly in the Sandakan district, worm infestations are common outside the town and a rather high proportion of amoebic dysentery was reported from the Beluran District. Amoebic dysentery can be encountered in almost every small town although the distribution is patchy.

Influenza:

26. The world-wide wave of "Asian influenza" reported in 1957 still affected the Colony in 1958 and a total of 7,493 cases were reported. The disease, however, appeared to be mild and no particularly notable complications were reported.

General Sanitation and Preventive Measures:

27. Most stations report an improvement in the general sanitation of their areas, particularly in the towns. In most towns there have been substantial improvements made by the Public Works Department relating either to improved water supplies; improved sanitation, or the result of the rebuilding of towns with a modern design of shophouse.

28. Health Inspectors are now posted at all the major towns in the Colony. They have continued to give good service in the fields of environmental hygiene and health education as well as to various Local Authorities in their districts. The service was depleted for a period of the year as two of the establishment of 14 health inspectors were absent in Singapore undertaking a course of training leading to the examination of the Certificate of the Royal Society of Health. One Health Inspector was successful in the examination.

29. Routine Port Health work was carried on throughout the year. The Colony is well protected with regard to traffic arriving from Singapore and Hong Kong where all ships and aircraft are thoroughly screened. The major potential danger, namely the introduction of epidemic disease, lies in small coastal vessels and fishing boats arriving from neighbouring territories at isolated spots along the coast.

Nutrition:

30. From all centres reports suggest that the state of nutrition of the public continues to improve, and this is particularly noticeable in those places where there is a flourishing import and export trade. A few cases of beri-beri occur but the majority are imported from elsewhere.

31. Almost all stations report that iron-deficiency anemia is still very common and particularly noticeable in pregnant women. With a view to improving nutrition and supplementing the Government drugs designed to improve the health of pregnant and nursing mothers and young children, UNICEF has generously continued to support with drug and diet supplements the Maternal and Child Welfare Clinics and

Health Centres throughout the Colony. UNICEF aid is now on a diminishing scale. Attendances at these clinics continue to increase and may be expected to increase still further. There is still need, however, for considerable work in the field of education regarding dietaries and nutrition, as many of the population still fail to make the best use of those sources of fresh food and vegetables, including fruit, which are available to them.

Ophthalmologist:

32. The Inter-territorial ophthalmologist for the three Borneo Territories of North Borneo, Brunei and Sarawak visited North Borneo from January to March 1958 and again from September to November 1958. Figures relating to the incidence of eye disease and the patients attending the ophthalmologist are found in Appendix D. The Ophthalmologist reports that in his experience, one-third of eye troubles appear to be optical and almost one-third more inflammatory in nature. Free spectacles are provided at Government expense for poor people who require them following cataract operations.

33. Of the inflammatory diseases, pterygia and pinguecula account for 40% of eye disease. These are considered by the ophthalmologist to be largely due to solar allergy which is ubiquitous and can in its early stages only be symptomatically relieved. Operation may be necessary later. Accidents account for considerable damage, most of it avoidable and some neglected by the patient until too late for treatment. In various places of employment, it is found that workmen do not take advantage of the protection provided for them in the shape of goggles and many other accidents have occurred whilst in domestic occupations such as felling jungle, reaping rice stubble, and even as a result of the simple process of cutting firewood.

Blindness:

34. 87 cases of total blindness were seen during the year in 37 of which sight was restored by the relief of cataract. 50 were unfortunately incurably blind. Trachoma remains the chief cause of blindness. Appendix D (Table D) shows the incidence of eye diseases.

Leprosy:

35. The Leper Settlement on Berhala Island was officially closed on the 21st November, 1958. This was rendered possible in part by discharging a number of patients back to their homes to continue outpatient treatment; in part to the co-operation of the Department of Labour and Welfare in accepting cured crippled patients in the Homes for the Aged, but largely due to the co-operation of the Government of Sarawak in accepting North Borneo patients suffering from leprosy for treatment in the Rajah Sir Charles Brooke Memorial Settlement at Kuching, all of whom volunteered to transfer there. By the end of the year there were 28 patients under treatment in the Kuching Settlement. It is proposed with the assistance of the Leper Welfare Relief Committee to make arrangements to re-settle those patients who are received back from the Kuching Settlement as cured and, in addition, to provide a transit centre for those awaiting transfer to Sarawak and also to assist the hopelessly crippled. The Leper Welfare Relief Committee continues to assist North Borneo patients who are under treatment in Sarawak and to offer support to their dependants.

CHAPTER II

GOVERNMENT HOSPITALS AND DISPENSARIES

36. Little major re-building took place in 1958, but as has already been mentioned above, the Tuberculosis wards approved in conjunction with the Duchess of Kent Hospital in Sandakan were under construction and should be brought into use early in 1959. It should be noted that both the major hospitals and all the cottage hospitals have been either completely rebuilt or renovated since the end of the war. In addition, there are many new dispensary buildings. It is likely that in regard to buildings, the Colony is probably well in advance of standards elsewhere, with the exception of specialised institutions, such as the mental hospital referred to in paragraph 42.

37. The two major hospitals in the Colony are situated at Jesselton and Sandakan. Their combined number of beds amounts to 422. At these General Hospitals full medical and surgical care of patients is provided. Very adequate operating theatre facilities, X-ray departments, and laboratories are available; and special wards are set aside for maternity cases, for children, and for the treatment of acutely ill tuberculosis patients and other infectious disease.

38. There are, in addition, five cottage hospitals totalling 367 beds, at each of which a Medical Officer is stationed. Each of these smaller hospitals acts as a centre for the surrounding districts which are regularly visited by the Medical Officer-in-Charge, or by his staff.

39. There are ten Outstation Dispensaries with restbeds to the number of 168 beds in all, each under the charge of a senior Hospital Assistant and regularly visited by a Medical Officer. In addition, there are eighteen smaller dispensaries at which outpatient treatment is available but at which no beds for inpatients are provided.

40. During the year 15,543 inpatients were treated as compared with 14,702 in 1957, and 256,017 outpatients were treated as compared with 244,542 in 1957. 62,021 patients were treated by mobile clinics and travelling dispensaries, over 25,000 more than in the preceding year. This follows an endeavour to bring better medical services to the rural population.

41. The two major health centres in Jesselton and Sandakan continued to work on an expanding scale throughout the year. These centres are designed to provide ante-and post-natal care and infant welfare clinics in the two large population centres. During the year over 77,000 mothers and children recorded attendances at ante-natal and infant welfare clinics throughout the Colony. Special emphasis is placed on health education through these centres which are not regarded as treatment clinics. The response of the mothers has been most encouraging. Considerable interest has also been shown in mothercraft classes for schoolgirls.

Buildings:

42. Unfortunately, financial stringency prevented the construction of tuberculosis wards originally planned for the cottage hospitals at Kudat, Labuan and Beaufort. The construction of a new mental hospital was postponed once more also largely owing to financial stringency.

Travelling Dispensaries:

43. In addition to the existing service of travelling dispensaries on roads, a travelling dispensary on the railway system was put into operation in September, 1955. This is a converted standard railway coach and consists of a dispensary, waiting space for patients and sleeping quarters for the Hospital Assistant in charge and his attendant. This dispensary operates on the line between Jesselton and Beaufort on the West Coast on a weekly schedule. Since its inception, it has proved extremely successful and now treats on the average some 1,200 patients a month.

Ambulance:

44. The ambulances available to the Department are subjected to very heavy use and their adequate maintenance and eventual replacement always involves considerable expense. Two new ambulances were brought into use early in 1957, one of them was stationed at Jesselton and the other in Sandakan. This permitted the disposal of two old and unsatisfactory ambulances.

Estate Hospitals and Dispensaries:

45. The Labour Ordinance provides for employers of Labour being required to furnish hospitals and medical supervision, care, and treatment for their workers. All the larger estates and industrial concerns have dispensaries or small hospitals, and during the year there were forty-nine places of employment at which such medical facilities were provided. A scheme has been formulated to enable dressers for estates and other commercial enterprises (who are required to employ them under the terms of the Labour Ordinance) to be trained in the Government training school. So far only one employer has taken advantage of this scheme in which the training is offered free of charge.

CHAPTER III

STAFF

46. The Department is administered by a Director and a Deputy Director of Medical Services, with a Health Officer, Colony Matron and a Medical Accountant-Storekeeper at Headquarters in Jesselton. During the year it was possible to maintain the approved establishment of thirteen medical officers in addition to the Colony Surgeon and Dental Surgeon. However, the Colony Matron, Sister Tutor and one Health Visitor retired or left the service during the year and their posts were still unfilled by the end of the year.

Nursing Staff:

47. The nursing staff consists of the following:—

Nursing Sisters	...	...	6
Staff Nurses	...	...	20
Trained Nurses	...	...	24
Probationer Nurses	...	...	19
Staff Hospital Assistants	...	...	28
Hospital Assistants	...	...	91
Probationer Hospital Assistants	...	...	23
Assistant Nurses	...	...	20

Training:

48. In addition to the regular training of probationer nurses and hospital assistants conducted by the Sister Tutor at the training school in Jesselton, additional training outside the Colony was continued. The training school had at the end of 1958—thirteen probationer nurses and eighteen hospital assistants under tuition. In addition to these, nine Village Midwives were also receiving training.

Overseas Scholarships and Training Courses:

49. There are at the present time many opportunities for suitably trained staff to undertake courses of study under the Colombo Plan and under the auspices of other bodies. For example, during the year 1958 staff of the Medical Department have been granted the following training opportunities:—

- (a) a six months' course in Radiology in Australia.
- (b) a twelve months' course in Dispensing in Australia.
- (c) a twelve months' Ward Sister's Course in England.
- (d) a six months' course of training by the Chest and Heart Association in England.
- (e) a course leading up to a degree in Bacteriology in Australia.
- (f) a course of training in Bacteriology at the Department of Bacteriology, University of Malaya, Singapore.
- (g) a three years' course in Mental Nursing in England.
- (h) a two years' course in Dental Nursing in New Zealand under the Colombo Plan.
- (i) a nine months' course of training for health inspectors leading to the Certificate of the Royal Society of Health in Singapore.
- (j) a full academic course leading to a medical degree in Australia.

50. The training scheme begun in the middle of 1955 of bringing in practising midwives for a period of training was continued during 1958. They spend three weeks at a recognised centre or hospital and are later provided with a simple midwifery bag supplied by UNICEF. By the end of 1958 sixty-four such practising midwives had been brought into centres for training. After six months most of such practising midwives are recalled for a refresher course.

Returns from Operating Theatre and Dental Department:

51. These will be found in Appendices A and B respectively.

52. Visits during the year were received from officials of the World Health Organisation whose Regional Office for the Western Pacific is situated in Manila and from the Resident Representative of the United Nations Children's Fund, whose headquarters are in Bangkok. Sir Alexander MacFarquhar, Regional Representative of the United Nations Technical Assistance Board for the Far East, visited in May, and a visit was also paid by Mr. R. H. Wade, Director of the Colombo Plan Bureau in June in connection with the new proposed scheme for the control of tuberculosis. In September

there was a visit from Dr. Cotter Harvey and Dr. Rubenstein, Australian Colombo Plan Tuberculosis Consultants, to investigate the problems of tuberculosis in the Colony with a view to advising on what methods should be introduced for its control. In November there was a visit from Dr. J. C. R. Buchanan, Deputy Chief Medical Officer to the Secretary of State. Also in November Professor A. G. Watkins of Cardiff, Specialist in Child Health, visited North Borneo under the Medical Visitors' Scheme whereby distinguished medical visitors are enabled to travel to Colonial territories. Professor Heaf, Consultant on Tuberculosis to the Secretary of State visited North Borneo in December to see something of the tuberculosis work and to discuss current tuberculosis problems with the head of the Medical Department. These visits were arranged by the Secretary of State for the Colonies.

CHAPTER IV

EXPENDITURE

53. The estimated expenditure on medical services from Colony funds in 1958 including personal emoluments amounted to \$3,414,287. This figure refers to Medical Department expenditure only, and does not include sums spent in the towns on municipal conservancy measures such as scavenging, removal of nightsoil and inspections by Town Board officials within the urban areas. Neither does it include capital expenditure on new buildings nor the generous aid which the Colony continued to receive during the year under Colonial Development and Welfare Schemes, from the United Nations Children's Fund, the World Health Organization and Colombo Plan Technical Assistance.

A summary is given below:—

(a) Personal emoluments	...	...	\$1,787,748
(b) Recurrent costs	...	...	1,543,415
(c) Special expenditure	...	...	83,124
	Total	...	\$3,414,287

APPENDIX A

MAJOR SURGICAL OPERATIONS PERFORMED DURING THE YEAR, 1958
AT THE JESSELTON HOSPITAL

<i>Major operations:</i>	...	...	...	468
Abdominal	...	...	...	122
Orthopaedic	...	...	...	32
Ano-Rectal	...	...	...	20
Hernias	...	...	...	30
Tonsils	...	...	...	33
Neck	...	...	...	10
Parotid Gland	...	...	...	2
Breast	...	...	...	1
E. N. T.	..	...	...	76
Eye	...	...	...	136
Empyema	...	...	...	6
<i>Minor operations, including fractures:</i>	...			906
			Total	...
				<u>1,374</u>

APPENDIX B

ANNUAL REPORT OF THE DENTAL DEPARTMENT FOR 1958

In midyear 1958 the first two locally recruited School Dental Nurses returned from New Zealand on completion of their training and were posted to Jesselton and Sandakan Health Centres. They were then given a month's period of introduction to their duties by the two New Zealand School Dental Nurses after which the New Zealand personnel returned on completion of their tour.

The School Dental Service is now firmly established, and is enjoying excellent parent co-operation. That the local populace in general and the Chinese race in particular now value the School service is evidenced by the falling rate of broken appointments, and by the clamour of those outside the selected treatment group to enjoy the same benefits.

The General Dental Service was patronised to its maximum and has shown further increases in the annual returns for most aspects of dentistry. As 1958 was the first full year of operation in the new Queen Elizabeth Hospital, it is felt that these increases can be attributed to the greater efficiency of modern equipment and pleasant surgeries and that further increases would be dependent on staff expansion. With further awareness of the need of dental fitness, no doubt due to rising educational standards, large numbers of patients, particularly school children, have of necessity been denied conservative treatment. This is a matter of regret.

STAFF

The establishment remains as follows:—

Dental Officer	...	...	...	1
Dental Assistant	...	...	...	1
Dental Technician	...	...	...	1
Dental Nurse/Receptionist	...	...	...	1
Attendant	...	...	...	1

SCHOOL DENTAL SERVICE

School Dental Nurses	...	...	...	2
Dental Receptionists	...	...	...	2

STAFF MOVEMENTS

The Dental Officer returned from long leave in March and relieved the Dental Officer on secondment from Sarawak. Both the Dental Technician and Assistant were on long leave during the year, and the reduced returns for prosthetic dentistry is a consequent result.

Tours of Labuan, Sandakan, and Tawau were undertaken in January and September, and as with former occasions the department was unable to cope with the demand in the time available.

GENERAL DENTAL SERVICE

Record of Treatment:

Attendances including inspections	...	...	...	4,540
Number of teeth restored	...	...	...	1,434
Number of temporary teeth extracted	...	...	...	3,027
Number of permanent teeth extracted	...	...	...	2,741
Other operations including temporary fillings, splint and surgical cases	...	...	...	1,075
Number of general anaesthetics administered	...	...	...	118
Number of X-rays taken	...	...	...	212
Number of full dentures	...	...	...	49
Number of partial dentures	...	...	...	38
Repairs to dentures	...	...	...	20
Inlays and Other metal castings	...	...	...	16
Appliances and splints	...	...	...	5
Post Crowns	...	...	...	3

APPENDIX B — (cont.)

SCHOOL DENTAL SERVICE

Jesselton:

Fillings	...	...	...	...	...	3,000
Extractions	...	...	...	...	...	597
Cleanings	...	...	...	...	...	711
Examinations	...	...	...	...	...	456
Completions	...	...	...	...	...	431
Attendances	...	...	...	...	...	2,554

SCHOOL DENTAL SERVICE

Sandakan:

Fillings	...	...	...	...	...	2,606
Extractions	...	...	...	...	...	1,356
Cleanings	...	...	...	...	...	801
Examinations	...	...	...	...	...	681
Completions	...	...	...	...	...	486
Attendances	...	...	...	...	...	2,438

APPENDIX C

Medical and Health staff of the Colony, including Mission doctors and private medical practitioners.

			<i>Government</i>	<i>Mission</i>	<i>Private</i>
Registered Physicians	...	...	16	1	36
Nursing Sisters	...	...	6	3	1
Staff Nurses	...	...	20	—	—
Trained Nurses	...	...	24	—	1
Probationer Nurses	...	...	19	—	—
Senior and Junior Staff					
Hospital Assistants	...	...	28	—	—
Hospital Assistants (Trained)	...		91	—	52
Probationer Hospital Assistants	...		23	—	—
Certified Midwives	...	...	40	3	40
Certified Village Midwives	...		24	—	—
Health Inspector Special Grade	...		1	—	—
Trained Health Inspectors	...		12	—	—
Probationer Health Inspectors	...		2	—	—
Kampong Midwives	...	...	—	—	64
Assistant Nurses	...	...	20	—	—
Total	...		326	7	194

APPENDIX D

Figures relating to the incidence of eye disease and patients attending the Ophthalmologist during 1958.

The incidence of eye disease compared with previous years, as follows:—

1.

<i>Year</i>	<i>New Cases</i>	<i>Repeat</i>	<i>Total</i>
1955	1,055	—	1,055
1956	1,600	359	1,959
1957	—	—	—
1958	1,464	290	1,754

TABLE A

Attendance**1st Visit January 3rd — March 6th**

2.

<i>Place</i>	<i>Period</i>	<i>New Cases</i>	<i>Repeat</i>	<i>Total</i>
Sandakan	... 18 days	291	61	352
Tawau	... 10 "	135	7	142
Jesselton	... 21 "	281	46	327
Tenom	... 4 "	37	5	42
Keningau	... 7 "	64	5	69
Labuan	... 3 "	47	3	50
Totals	... 63 "	865	127	992

TABLE B

2nd Visit September 22nd — November 5th

3.

<i>Place</i>	<i>Period</i>	<i>New Cases</i>	<i>Repeat</i>	<i>Total</i>
Sandakan	... 13 days	206	46	252
Kudat	... 7 "	83	10	93
Jesselton	... 21 "	274	104	378
Labuan	... 3 "	36	3	39
Totals	... 44 "	599	163	762
Grand Total	... 107 "	1464	290	1754

TABLE C

Racial Attendance

4.

	<i>Chinese</i>	<i>Indigenous and Malay</i>	<i>European</i>	<i>Others</i>	<i>Total</i>
Sandakan	... 403	43	27	26	497
Kudat	... 68	11	1	3	83
Jesselton	... 325	141	58	31	555
Tawau	... 89	30	15	1	135
Tenom	... 24	10	—	3	37
Keningau	... 19	42	2	1	64
Labuan	... 40	26	9	8	83
Totals	... 966	303	112	73	1464

TABLE D

Incidence of Diseases**I. Optical (508)**

Hypermetropia	...	76
Myopia	...	151
Astigmatism	...	72
Presbyopia	...	111
Aphakia	...	32
Other	...	66
Total	...	508

APPENDIX D—(cont.)

II. Inflammatory			
Lids	...	...	59
Lacrimal apparatus	...	...	18
Conjunctiva	...	...	53
Cornea	...	...	29
Corneal ulcers	...	...	8
Iris	...	...	21
Uvea	...	...	22
Optic neuritis	...	...	9
Pterygium	...	...	174
Pinguecula	...	...	20
Recurrent pterygia	...	...	10
Trachoma	...	...	70
Ophthalmia neonatorum	...	...	3
Kerato conjunctivitis	...	...	8
Effects of glare	...	...	12
	Total	...	516
III. Traumatic (130)			
Injury eyeball	...	...	82
Traumatic Cataract	...	...	22
F. B. cornea	...	...	10
Retinal detachments	...	...	5
Retinal vascular accidents	...	...	11
IV. Degenerative (285)			
Senile Cataracts	...	...	104
Diabetic Cataract	...	...	3
Secondary Cataract	...	...	17
Lids	...	...	2
Cornea	...	...	42
Contracted eyeball	...	...	29
Optic atrophy	...	...	16
Acute Glaucoma	...	...	10
Chronic glaucoma	...	...	21
Retinitis pigmentosa	...	...	8
Choris retinitis	...	...	18
Staphylomata	...	...	12
Macular degenerations	...	...	3
V. Congenital (42)			
Congenital cataracts	...	...	11
Congenital optic atrophy	...	...	5
Strabismus	...	...	24
Ptosis	...	...	2
VI. Neoplastic (34)			
Tumour lids	...	...	19
Tumour conjunctiva	...	...	11
Tumour eyeball	...	...	3
Retrobulbar	...	...	1
VII. Nutritional diseases (23)			
Phlyctenular ulcers	...	...	7
Keratomalacia	...	...	5
Optic neuritis	...	...	2
Night blindness	...	...	6
Avitaminosis	...	...	3
VIII. Intracranial Conditions affecting eyes			
	...	...	14
IX. Blindness (87)			
Bilateral Cataract Blindness	...	...	37
Inoperable blindness	...	...	50
Total blindness	...	...	87

APPENDIX E MEDICAL

A — Institutions (Government)				Number of Institutions	Number of beds	
1. Hospitals:						
(a) General hospitals (institutions equipped to deal adequately with all general medical and surgical cases) ...				2	422	
(b) Cottage hospitals or infirmaries (smaller institutions equipped to handle only lighter cases, more severe cases being referred to General Hospital) ...				5	367	
2. Dispensaries (institutions for treatment mainly of out-patients):						
(a) Exclusively for out-patients ...				18	—	
(b) Having beds for lighter cases to be referred to General Hospital ...				12	204	
				In General Hospital	In Dispensary	As Separate Unit
3. Specialised Units:						
(a) Maternity and Child Welfare Centres ...				—	—	2
(b) Tuberculosis ...				2	—	—
(c) Venereal disease ...				—	—	—
(d) Leprosaria ...				—	—	1
(e) Mental Institutions ...				—	—	1
(f) Others ...				—	—	—
				Number of Units		Total Staff
4. Mobile Units ...				4	8	

APPENDIX F STAFF

	1954			1955			1956			1957			1958		
	Establishment	Actual	Vacancies	Establishment	Actual	Vacancies	Establishment	Actual	Vacancies	Establishment	Actual	Vacancies	Establishment	Actual	Vacancies
SENIOR OFFICERS:															
Director of Medical Services	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Deputy Director of Medical Services	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Surgeon	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Medical Officers	11	9	2	12	11	1	12	12	—	12	11	1	13	13	—
Health Officer	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Accountant-Storekeeper	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Dentist	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Health Visitor	1	1	—	1	1	—	2	2	—	2	2	—	2	2	—
SENIOR NURSING STAFF:															
Colony Matron	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Nursing Sisters	6	4	2	6	5	1	6	6	—	6	6	—	6	6	—
Sister Tutor	—	—	—	—	—	—	1	1	—	1	1	—	1	1	—
JUNIOR NURSING STAFF:															
Dressers—Special Grade	—	—	—	—	—	—	—	—	—	—	—	—	3	2	1
Senior Staff Nurse and Senior Staff Hospital Assistants	9	9	—	9	8	1	15	14	1	20	18	2	17	17	—
Staff Nurses and Staff Hospital Assistants	14	14	—	15	14	1	15	15	—	34	30	4	34	30	4
Trained Dressers and Trained Nurses	198	172	26	200	195	5	195	191	4	171	153	7	161	145	16
Midwives	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Assistant Nurses	—	—	—	—	—	—	10	10	—	20	20	—	20	20	—

APPENDIX F—(cont.)

STAFF

	1954			1955			1956			1957			1958		
	Establishment	Actual	Vacancies	Establishment	Actual	Vacancies	Establishment	Actual	Vacancies	Establishment	Actual	Vacancies	Establishment	Actual	Vacancies
HEALTH STAFF:															
Health Inspector—															
Special Grade ...	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2
Health Inspectors ...	12	11	1	12	11	1	12	12	—	14	14	2	14	14	—
Vaccinators ...	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Rat Catchers ...	3	3	—	3	3	—	3	3	—	3	3	—	3	3	—
Village Health Inspectors ...	10	10	—	10	9	1	10	9	1	10	10	—	11	11	—
Anti-Mosquito Assistants ...	3	3	—	3	3	—	3	3	—	3	3	—	3	3	—
MATERNITY & CHILD WELFARE:															
Staff Village Midwives ...	2	1	1	2	1	1	2	2	—	2	2	—	2	2	—
Village Midwives ...	29	16	13	29	18	11	29	19	10	29	27	2	29	29	—
MISCELLANEOUS JUNIOR STAFF:															
Laboratory Assistant ...	1	—	1	1	—	1	11	10	1	8	8	—	9	9	—
Dental Mechanic ...	1	1	—	1	1	—	1	1	—	1	1	—	1	1	—
Mandors ...	7	7	—	7	7	—	7	6	1	7	6	1	7	6	1
Messengers ...	6	6	—	6	6	—	6	6	—	7	7	—	7	7	—
Watchmen ...	7	7	—	7	7	—	7	5	2	7	5	2	7	5	2
Attendants and Servants ...	176	176	—	181	181	—	186	186	—	202	202	—	210	210	—
Cooks at Hostels ...	3	3	1	3	3	—	3	3	—	3	3	—	3	3	—
Amahs at Hostels ...	3	3	—	3	3	—	3	3	—	3	3	—	3	3	—

APPENDIX G

VITAL STATISTICS REVISED TO INCLUDE LATE REGISTRATION

TABLE 1

TOTAL BIRTHS AND DEATHS REGISTERED IN COLONY, 1958

<i>Place</i>	<i>Births</i>			<i>Deaths</i>		
	<i>Total</i>	<i>Male</i>	<i>Females</i>	<i>Total</i>	<i>Male</i>	<i>Females</i>
Colony	12,990	6,860	6,130	3,206	1,810	1,396

TABLE 2

TOTAL BIRTHS AND DEATHS BY REGISTRATION DISTRICTS, 1958

<i>Residency</i>	<i>Registration District</i>	<i>BIRTHS</i>			<i>DEATHS</i>		
		<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
WEST COAST	Jesselton ...	1,069	592	477	341	197	144
	Penampang ...	529	280	249	96	60	36
	Menggatal ...	307	151	156	40	24	16
	Tuaran ...	829	437	392	191	123	68
	Tenghilan ...	162	97	65	38	22	16
	Kota Belud ...	405	202	203	101	52	49
	Ranau ...	361	188	173	172	98	74
	Bundu Tuhan ...	79	49	30	38	24	14
	Papar ...	1,100	568	532	264	145	119
	Kudat ...	771	395	376	240	110	130
SANDAKAN	Sandakan ...	2,073	1,090	983	493	293	200
TAWAU	Tawau ...	1,154	591	563	176	105	71
	Lahad Datu ...	537	276	261	146	83	63
	Semporna ...	264	165	99	92	57	35
INTERIOR AND LABUAN	Keningau ...	323	187	136	92	51	41
	Tambunan ...	391	214	177	96	52	44
	Pensiangan and Sepulot ...	81	47	34	49	28	21
	Tenom ...	464	252	212	59	33	26
	Beaufort ...	924	483	441	199	110	89
	Kuala Penyu ...	270	140	130	59	31	28
	Sipitang ...	250	129	121	51	25	26
	Labuan ...	647	327	320	173	87	86
TOTAL ...		12,990	6,860	6,130	3,206	1,810	1,396

APPENDIX G — (cont.)

TABLE 3

BIRTHS AND DEATHS REGISTERED BY RACE, 1958

<i>Race</i>	<i>Births</i>			<i>Deaths</i>		
	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>
Chinese ...	4,237	2,256	1,981	601	359	242
Dusun ...	3,910	2,041	1,869	1,273	702	571
Sino-Dusun ...	227	119	108	24	13	11
Bajau ...	1,122	591	531	351	199	152
Murut ...	381	196	185	130	71	59
Malay ...	294	170	124	96	56	40
Bisaya ...	370	192	178	114	60	54
Brunei ...	1,090	577	513	256	123	133
Indonesian ...	704	369	335	128	83	45
Filipino ...	332	188	144	79	48	31
Indian ...	84	38	46	11	7	4
Cocos ...	94	49	45	21	11	10
European and Eurasian ...	60	33	27	7	4	3
Others ...	85	41	44	31	27	4
Unknown ...	—	—	—	84	47	37
TOTAL ...	12,990	6,860	6,130	3,206	1,810	1,396

TABLE 4

COMPARISON OF BIRTHS AND DEATHS REGISTERED BY RACE, 1958

<i>Race</i>	<i>Excess of Births over Deaths</i>		<i>Ratio: Births Deaths</i>
Chinese ...	...	3,636	7.0
Dusun ...	...	2,637	3.1
Sino-Dusun ...	...	203	9.5
Bajau ...	...	771	3.2
Murut ...	...	251	2.9
Malay ...	...	198	3.1
Bisaya ...	...	256	3.2
Brunei ...	...	834	4.3
Indonesian ...	...	576	5.5
Filipino ...	...	253	4.2
Indian ...	...	73	7.6
Cocos ...	...	73	4.5
European and Eurasian ...	...	53	8.6
Others ...	...	54	2.7
Unknown ...	...	84	—
TOTAL ...		9,784	4.1

APPENDIX G — (cont.)

TABLE 5

INFANT MORTALITY RATE (DEATHS UNDER ONE YEAR OF AGE
PER 1,000 LIVE BIRTHS) BY RACE, 1958

<i>Race</i>				<i>Deaths under one Year of Age</i>	<i>Infant Mortality Rate</i>
Chinese	...	...	...	142	33.8
Dusun	...	...	...	333	85.2
Sino-Dusun	...	...	...	15	66.1
Bajau	...	...	...	113	100.7
Murut	...	...	...	25	65.6
Malay	...	...	...	44	149.7
Bisaya	...	...	...	41	110.8
Brunei	...	...	...	98	89.9
Indonesian	...	...	...	63	89.5
Filipino	...	...	...	27	81.3
Indian	...	...	...	2	23.8
Cocos	...	...	...	8	85.1
European and Eurasian	...	...	...	1	16.7
Others	...	...	...	8	94.1
Unknown	...	...	...	20	—
TOTAL				941	72.4

APPENDIX H

**ANNUAL RETURN OF MORBIDITY AND MORTALITY
FOR THE YEAR, 1958**

1. Racial Classification:

			OUT-PATIENTS		IN-PATIENTS
			<i>New Cases</i>	<i>Repeat Cases</i>	<i>New Cases admitted during year</i>
Native,	1958 ...	...	175,680	102,002	8,001
	1957 ...	...	164,079	69,040	7,671
	1956 ...	...	139,908	66,434	7,461
	1955 ...	...	137,687	59,417	6,555
Chinese,	1958 ...	...	64,748	76,891	5,980
	1957 ...	...	66,410	52,768	5,237
	1956 ...	...	54,767	57,562	5,156
	1955 ...	...	50,180	44,274	4,578
Others,	1958 ...	...	15,589	15,348	1,562
	1957 ...	...	14,053	11,936	1,794
	1956 ...	...	13,181	10,282	1,835
	1955 ...	...	8,320	8,454	1,171
Total	1958 ...	...	256,017	194,241	15,543
	1957 ...	...	144,542	133,744	14,702
	1956 ...	...	207,856	134,278	14,452
	1955 ...	...	196,187	112,145	12,304

2. Patients seen at Ante-natal Clinics and not recorded in above or detailed classification of disease:

(1) New Cases	...	...	...	...	1,665
(2) Repeat Cases	...	...	...	...	19,544
(3) Contact Examined	...	...	...	...	317

3. Travelling Clinics:

(1) New Cases Seen	...	...	...	...	62,021
--------------------	-----	-----	-----	-----	--------

4. Operations:

(1) Major	...	...	...	...	607
(2) Minor	...	...	...	...	5,089

5. Vaccinations	...	...	...	...	19,599
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RETURN OF MORBIDITY AND MORTALITY FOR THE YEAR, 1958

Intermediate List Numbers	Detailed List Numbers	CAUSE GROUPS	Outpatient 1st Attendances	Inpatient Admitted	Died in Hospital
A 1	001—008	Tuberculosis of respiratory system	323	871	40
A 2	010	Tuberculosis of meninges and central nervous system	1	12	7
A 3	011	Tuberculosis of intestines, peritoneum and mesenteric glands	7	8	—
A 4	012, 013	Tuberculosis of bones and joints	7	17	1
A 5	014—019	Tuberculosis, all other forms	330	130	5
A 6	020	Congenital syphilis	1	—	—
A 7	021	Early syphilis (primary and secondary)	4	—	—
A 8	024	Tabes dorsalis	—	—	—
A 9	025	General paralysis of insane	—	—	—
A 10	022, 023 }	All other syphilis	23	3	—
A 11	026—029 }				
	030—035	Gonococcal infections:			
		(1) Acute	56	11	—
		(2) Other	16	2	—
A 12	040	Typhoid fever	2	4	1
A 13	041, 042	Paratyphoid fever and other salmonella infections	—	—	—
A 14	043	Cholera	—	—	—
A 15	044	Brucellosis (undulant fever)	—	—	—
A 16	045	Bacillary dysentery	27	15	—
(a)	046	Amoebiasis	366	169	3
(b)		Other unspecified forms of dysentery	2381	116	—
(c)	047, 048				
A 17	050	Scarlet fever	—	—	—
A 18	051	Streptococcal sore throat	111	4	—
A 19	052	Erysipelas	—	1	—
A 20	053	Septicæmia and Pyæmia	—	—	—
A 21	055	Diphtheria	4	10	4
A 22	056	Whooping Cough	321	5	—
A 23	057	Meningococcal infections	2	3	1
A 24	058	Plague	—	—	—
A 25	060	Leprosy	10	20	—
A 26	061	Tetanus	2	14	4

A 27	062	Anthrax	...	...	...	—	—
A 28	080	Acute poliomyelitis	...	...	...	—	—
A 29	082	Acute infectious encephalitis	...	...	...	—	—
A 30	081, 083	Late effects of acute poliomyelitis and acute infectious encephalitis	...	...	...	—	—
A 31	084	Small-pox	...	...	...	—	—
A 32	085	Measles	...	...	...	—	—
A 33	091	Yellow fever	...	...	...	—	—
A 34	092	Infectious hepatitis	...	...	...	—	—
A 35	094	Rabies	...	...	...	—	—
A 36	100	Louse-borne epidemic typhus	...	...	...	—	—
(a)	101	Flea-borne epidemic typhus (murine)	...	...	...	—	—
(b)	104	Tick-borne epidemic typhus	...	...	...	—	—
(c)	105	Mite-borne typhus	...	...	...	—	—
(d)	102—103	Other and unspecified typhus	...	...	...	—	—
(e)	106—108					—	—
A 37	110	Vivax Malaria (benign tertian)	...	...	...	—	—
(a)	111	Malariae Malaria (quartan)	...	...	...	—	—
(b)	112	Falciparum malaria (malignant tertian)	...	...	...	—	—
(c)	115	Blackwater fever	...	...	...	—	—
(d)	113, 114	Other and unspecified forms of malaria	...	...	...	—	—
(e)	116, 117					—	—
A 38	123.0	Schistosomiasis vesical (S. hæmatobium)	...	...	...	—	—
(a)	123.1	Schistosomiasis intestinal (S. mansoni)	...	...	...	—	—
(b)	123.3	Other and unspecified schistosomiasis	...	...	...	—	—
(c)	125	Hydatid disease	...	...	...	—	—
A 39	127	Onchocerciasis	...	...	...	—	—
A 40	(a)	Loisais	...	...	...	—	—
(a)	(b)	Filariasis (bancrofti)	...	...	...	—	—
(b)	(c)	Other filariasis	...	...	...	—	—
(c)	(d)	Ankylostomiasis	...	...	...	—	—
A 41	129	Tapeworm (infestation) and other cestode infestations	...	...	...	—	—
A 42	126	Ascariasis	...	...	...	—	—
(a)	130.0	Guinea worm (dracunculosis)	...	...	...	—	—
(b)	130.3	Other diseases due to helminths	...	...	...	—	—
(c)	124, 128,					—	—
(d)	130.1, 130.2					—	—

RETURN OF MORBIDITY AND MORTALITY FOR THE YEAR, 1958 — (cont.)

Intermediate List Numbers	Detailed List Numbers	C A U S E G R O U P S	Outpatient 1st Attendances	Inpatient Admitted	Died in Hospital
A 43	(a) 037	Lymphogranuloma venereum ...	—	—	—
	(b) 038	Granuloma inguinale, venereal ...	—	1	—
	(c) 039	Other and unspecified venereal diseases ...	4	2	—
	(d) 049	Food poisoning infection and intoxication ...	52	18	—
	(e) 071	Relapsing fever ...	—	—	—
	(f) 072	Leptospirosis icterohæmorrhagica (Weil's disease) ...	13	1	—
	(g) 073	Yaws ...	3283	31	—
	(h) 087	Chicken-pox ...	993	54	—
	(i) 090	Dengue ...	—	2	—
	(j) 095	Trachoma ...	25	7	—
	(k) 096.7	Sandfly fever ...	—	—	—
	(l) 120	Leishmaniasis ...	—	—	—
	(m) 121 (a)	Trypanosomiasis gambiensis ...	—	—	—
	(b) 121 (b)	Trypanosomiasis rhodesiensis ...	—	—	—
	(c) 121 (c)	Other and unspecified trypanosomiasis ...	—	—	—
(n)	131	Dermatophytosis (kurap, etc.) ...	4512	52	—
(o)	135	Scabies ...	2279	20	—
(p)	036, 054, 059, 063, 064, 070, 074, 086, 088, 089, 093, 096.1—096.6, 096.8, 096.9, 122, 132—134, 136—138	All other diseases ...	1002	24	—
	140—148	Classified as infective and parasitic ...	—	—	—
A 44	140—148	Malignant neoplasm of buccal cavity and pharynx ...	8	8	1
A 45	150				
A 46	151	Malignant neoplasm of stomach ...	2	12	1
A 47	152, 153	Malignant neoplasm of intestine, except rectum ...	10	2	1

A 48	154	Malignant neoplasm of rectum ...	7	7	—
A 49	161	Malignant neoplasm of larynx ...	15	7	3
A 50	162, 163	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary ...	—	6	3
A 51	170	Malignant neoplasm of breast ...	1	2	1
A 52	171	Malignant neoplasm of cervix uteri ...	—	18	4
A 53	172—174	Malignant neoplasm of other and unspecified parts of uterus ...	—	14	—
A 54	177	Malignant neoplasm of prostate ...	—	1	—
A 55	190, 191	Malignant neoplasm of skin ...	—	—	—
A 56	196, 197	Malignant neoplasm of bone and connective tissue ...	1	5	—
	155—160				
	164, 165				
A 57	175, 176	Malignant neoplasm of all ...	—	—	—
	178—181	Other and unspecified sites ...	30	70	—
	192—195				
	198, 199				
A 58	204	Leukaemia and aleukaemia ...	—	3	1
A 59	200—203, } 205	Lymphosarcoma and other neoplasms and haematopoietic system ...	—	1	—
A 60	210—239	Benign neoplasms and neoplasms of unspecified nature ...	22	15	—
A 61	250, 251	Nontoxic goitre ...	239	8	—
A 62	252	Thyrototoxicosis with or without goitre ...	20	11	1
A 63	260	Diabetes mellitus ...	76	35	—
A 64 (a)	280	Beri-beri ...	268	76	1
(b)	281	Pellagra ...	1	1	—
(c)	282	Scurvy ...	—	1	—
(d)	283—286	Other deficiency states ...	3180	59	—
A 65 (a)	290	Pernicious and other hyperchromic anaemias ...	19	11	3
(b)	291	Iron deficiency anaemias (hypochromic) ...	1458	25	—

RETURN OF MORBIDITY AND MORTALITY FOR THE YEAR, 1958 — (cont.)

Intermediate List Numbers	Detailed List Numbers	CAUSE GROUPS	Outpatient 1st Attendances	Inpatient Admitted	Died in Hospital
A 66 (c)	292, 293	Other specified and unspecified anaemias ...	14371	236	3
A 66 (a)	241	Asthma ...	1739	167	5
A 66 (b)	240	All other allergic disorders ...	640	64	—
	242—245				
	253, 254				
	270—277				
	287—289				
	294—299				
	300—309				
A 67	310—324	Endocrine, metabolic and blood diseases ...	52	13	2
A 68	326				
	325				
A 69	300—334	Psychoses ...	2	8	—
A 70	340	Psychoneuroses and disorders personality ...	13	23	—
A 71	345	Mental deficiency ...	19	108	—
A 72	353	Vascular lesions affecting central nervous system ...	—	9	1
A 73	370—379	Non-meningococcal meningitis ...	4	1	—
A 74	385	Multiple sclerosis ...	—	3	—
A 75	387	Epilepsy ...	47	21	—
A 76	390	Inflammatory diseases of eye ...	4294	128	—
A 77 (a)	391—393	Cataract ...	118	63	—
A 77 (b)	394	Glaucoma ...	19	17	—
A 77 (c)	386, 388	Otitis externa ...	1307	12	—
A 78 (a)	389	Otitis media and mastoiditis ...	2084	37	—
	341, 344	Other inflammatory disease of ear ...	922	9	1
	350—352	All other diseases and conditions of eye ...	1916	121	—
	354—357				
	360—369				
	395—398				
	400—402				
		All other diseases of the nervous system and sense organs ...	1939	88	6
A 79		Rheumatic fever ...	45	8	—

A 80	410—416	Chronic rheumatic heart disease	...	...	6	3	—
A 81	420—422	Arteriosclerotic and degenerative heart disease	...	...	15	8	—
A 82	430—434	Other diseases of heart	...	...	101	67	17
A 83	440—443	Hypertension with heart disease	...	...	26	11	2
A 84	444—447	Hypertension without mention of heart	...	...	139	41	3
A 85	450—456	Diseases of arteries	...	...	5	8	1
A 86	460—468	Other diseases of circulatory system	...	...	477	55	4
A 87	470—475	Acute upper respiratory infections	...	...	11089	114	6
A 88	480—483	Influenza	...	...	7342	151	—
A 89	490	Lobar pneumonia	...	...	17	85	6
A 90	491	Bronchopneumonia	...	...	197	180	41
A 91	492, 493	Primary a typical, other and unspecified pneumonia	...	...	786	194	15
A 92	500	Acute bronchitis	...	...	7175	161	2
A 93	501, 502	Bronchitis, chronic and unqualified	...	...	12680	294	1
A 94	510	Hypertrophy of tonsils and adenoids	...	...	1386	96	2
A 95	518, 521	Empyema and abscess of lung	...	...	1	8	2
A 96	519	Pleurisy	...	...	438	30	—
A 97 (a)	523	Pneumoconiosis	...	...	—	—	—
(b)	511—517 } 520—522 } 524—527 }	All other respiratory diseases	...	...	5944	71	—
A 98 (a)	530	Dental caries	...	...	4144	18	—
A 99 (b)	531—535	All other diseases of teeth and supporting structures	...	...	1455	23	—
	540	Ulcer of stomach	...	...	16	38	7
A 100	541	Ulcer of duodenum	...	...	9	26	—
A 101	543	Gastritis and duodenitis	...	...	3154	71	—
A 102	550—553	Appendicitis	...	...	43	88	—
	570 } 560, 561 }	Intestinal obstruction and hernia	...	...	46	69	2
A 103	571.0	Gastro-enteritis and colitis between four weeks and two years	...	...	2001	215	32
A 104 (a)							

RETURN OF MORBIDITY AND MORTALITY FOR THE YEAR, 1958 — (cont.)

Intermediate List Numbers	Detailed List Numbers	CAUSE GROUPS	Outpatient 1st Attendances	Inpatient Admitted	Died in Hospital
A 104 (b) (c)	571.1 572	Gastro-enteritis and colitis, ages 2 years and over ...	3161	127	11
A 105	581	Chronic enteritis and ulcerative colitis ...	299	15	—
A 106	584, 585	Cirrhosis of liver ...	15	45	9
A 107	536—539 542, 544	Cholelithiasis and cholecystitis ...	182	26	1
	545				
	573—580	Other diseases of digestive system ...	7172	341	8
	582, 583				
	586, 587				
A 108	590	Acute nephritis ...	102	42	—
A 109	591—594	Chronic, other and unspecified nephritis ...	124	37	1
A 110	600	Infections of kidney ...	31	22	3
A 111	602, 604	Calculi of urinary system ...	4	17	—
A 112	610	Hyperplasia of prostate ...	40	2	—
A 113	620, 621	Diseases of breast ...	149	15	—
A 114 (a)	613	Hydrocele ...	12	9	—
(b)	634	Disorders of menstruation ...	580	72	—
(c)	601, 603				
	605—609				
	611, 612				
	614—617	All other diseases of the Genito-urinary system ...	660	184	1
	622—633				
	635—637				
A 115	640—641 681, 682	Sepsis of pregnancy, childbirth and the puerperium	75	18	1
	684				
A 116	642, 652 685, 686	Toxæmias of pregnancy and the puerperium ...	26	27	1
A 117	643, 664 670—672	Haemorrhage of pregnancy and childbirth ...	8	34	6
A 118	650	Abortion without mention of sepsis or toxæmia ...	74	192	—

A 119	651	Abortion with sepsis ...	...	...	23	24	—
A 120 (a)	645—649	Other complications of pregnancy, childbirth and the puerperium ...	...	...	200	209	12
	673—680						
	683						
	687—689						
(b)	660	Delivery without complications ...	...	...	438	1564	—
A 121	690—698	Infections of skin and subcutaneous tissue ...	...	...	1523	405	—
A 122	720—725	Arthritis and spondylitis ...	...	...	1601	77	—
A 123	726, 727	Muscular rheumatism and rheumatism unspecified	...	...	7532	72	1
A 124	730	Osteomyelitis and periostitis ...	...	...	23	19	1
A 125	737 745—749	Ankylosis and acquired musculo-skeletal deformities	...	...	8	2	—
A 126 (a)	715	Chronic ulcer of skin (including tropical ulcer) ...	...	...	15120	146	1
(b)	700—714 716	All other diseases of skin ...	...	...	8936	245	—
(c)	731—736 738—744	All other diseases of musculo-skeletal system	...	...	77	5	—
A 127	751	Spina bifida and meningocele ...	...	...	—	—	—
A 128	754	Congenital malformations of circulatory system ...	...	...	5	6	—
A 129	750, 752 753 755—759	All other congenital malformations	...	...	6	18	1
A 130	760, 761	Birth injuries ...	...	...	—	2	—
A 131	762	Post-natal asphyxia and atelectasis ...	...	...	1	10	—
A 132 (a)	764	Diarrhoea of new-born (under four weeks)	...	...	170	3	—
(b)	765	Ophthalmia neonatorum ...	...	...	—	—	—
'E9L	(c)						
	766—768	Other infections of new-born ...	...	...	2	4	3
A 133	770	Haemolytic disease of new-born ...	...	...	2	6	—

RETURN OF MORBIDITY AND MORTALITY FOR THE YEAR, 1958 — (cont.)

Intermediate List Numbers	Detailed List Numbers	CAUSE GROUPS	Outpatient 1st Attendances	Inpatient Admitted	Died in Hospital
A 134	769, 771, 772, 773, 776	All other defined diseases of early infancy	78	14	2
A 135		Ill-defined diseases peculiar to early infancy, and immaturity unqualified	10	25	4
A 136	794	Senility without mention of psychosis	65	23	2
A 137 (a)	788.8	Pyrexia of unknown origin	1050	110	2
(b)	793	Observation, without need for further medical care	5532	945	—
(c)	780—787 788.1 788.7 789.9 789—792 795	All other ill-defined causes of morbidity	2598	627	2
AE 138	E810—E835	Motor vehicle accidents	67	44	2
AE 139	E800—E802 E840—E866	Other transport accidents	286	39	2
AE 140	E870—E895	Accidental poisoning	22	20	1
AE 141	E900—E904	Accidental falls	2373	359	7
AE 142	E912	Accident caused by machinery	192	24	—
AE 143	E916	Accident caused by fire and explosion of combustible material	136	36	4
AE 144	E917, E918	Accident caused by hot substance corrosive liquid, steam and radiation	717	87	1
AE 145	E919	Accident caused by fire-arm	3	10	—
AE 146	E929	Accidental drowning and submersion	7	3	—
AE 147 (a)	E920	Foreign body entering eye and adnexa	125	8	—
(b)	E923	Foreign body entering other orifice	256	16	—
(c)	E927	Accidents caused by bites and stings of venomous animals and insects	729	82	—
(d)	E928	Other accidents caused by animals	362	29	—

AE 147 (e)

E910, E911
E913—E915
E921—E922
E924—E926
E930—E965

All other accidental causes	...	...	1420	772	1
Suicide and self-inflicted injury	...	...	—	5	1
Homicide and injury purposely inflicted by other persons (not in war)	...	...	90	10	—
Injury resulting from operations of war	...	...	—	—	—

AE 148

E970—E979

AE 149

E980—E985

AE 150

E900—E999

“N” CODE. ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS, AND VIOLENCE
(NATURE OF INJURY)

Intermediate List Numbers	Detailed List Numbers	CAUSE GROUPS				Outpatient 1st Attendances	Inpatient Admitted	Died in Hospital
AN 138	N800—N804	Fracture of skull	...	...	...	4	27	6
AN 139	N805—N809	Fracture of spine and trunk	...	...	...	5	16	—
AN 140	N810—N829	Fracture of limbs	...	...	...	112	212	2
AN 141	N830—N839	Dislocation without fracture	...	...	...	89	24	—
AN 142	N840—N848	Sprains and strains of joints and adjacent muscle	...	...	...	3386	81	—
AN 143	N850—N856	Head injury (excluding fracture)	...	...	...	31	45	3
AN 144	N860—N869	Internal injury of chest, abdomen, and pelvis	...	...	...	11	47	1
AN 145	N870—N908	Laceration and open wounds	...	...	...	2269	588	2
AN 146	N910—N929	Superficial injury, contusion and crushing with intact skin surface	...	...	...	437	209	—
AN 147	N930—N936	Effects of foreign body entering through orifice	...	...	...	370	54	1
AN 148	N940—N949	Burns	...	...	...	710	93	3
AN 149	N960—N979	Effects of poisons	...	...	...	176	45	2
AN 150	N950—N959 N980—N999	All other and unspecified effects of external causes	...	...	...	1169	39	—

